Amdt. dated May 1, 2006 Reply to Office action of January 31, 2006

Amendments to the Specification:

Please replace paragraph [0003] with the following paragraph:

[0003] Herrman '562 '564 also teaches that the abrasive pieces may include diamond or superabrasive particles, such as cubic boron nitride ("cBN") dispersed therein for reasons which are obvious to those of ordinary skill in the art However, it is customary for machining operations being performed with such a superabrasive grinding device to require a flow of coolant to be directed thereover, as described in Herrman '564, for the purposes discussed therein. For reasons that will be obvious to one of ordinary skill in the art, such "wet machining" operations are undesirable. It is desirable, therefore, to provide a grinding device, such as, for example, a surface grinding disc or an annular grinding wheel, constructed from a plurality of abrasive segments arranged in an array thereon, wherein the abrasive segments include superabrasive particles dispersed therein, and wherein the device is adapted to operate in a "dry machining" environment, that is, for example, without the use of more than a nominal quantity of coolant or other lubricant.

Please replace paragraph [0024] with the following paragraph:

[0024] With reference to FIGS. 1-3, a grinding device 10 according to a preferred embodiment of the present invention takes the form of a surface grinding disc suitable for machining substantially flat workpieces, such as, for example, brake rotors, power steering pump rings and rotors, valve plates, coil spring ends, and the like. The device 10 includes a circular rigid base 20, constructed from, for example, aluminum or steel, one or more abrasive segments 30 (sometimes referred to as "buttons") secured within a

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matrix composition 40 which is generally circular in shape and conterminous with the base 20. Segments 30 can be viewed as being "embedded" in the matrix composition 40 and may be integrally formed therein or may be inserted into pockets (not shown) formed into the matrix 40 after the matrix has been secured to the base 20. Segments 30 are shown to have a thickness, which is for the purpose of illustration only. Matrix 40 preferably extends to the periphery 24 of the base 20, although it may extend <u>over</u> only a portion over the base 20 towards the periphery 24 thereof. In either case, matrix 40 covers enough of the base 20 and surrounds each of the segments 30 sufficiently to retain segments 30 thereby. Although segments 30 are shown in FIG. 1 arranged in a circular array forming an array path 26 concentric with the device 10, segments 30 may, alternatively, be arranged in some other array.

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